

Contractor Fatality Preliminary Report

Equipment:

Model 703 Bobcat Skid-Steer Loader with Backhoe.

Job:

Excavate a shallow trench around a roof drainage pond
(approximately .3 meter /1 foot; .6 meter/2 feet wide)

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On September 23, 2002, a worker was fatally injured while operating a backhoe attachment on a Bobcat Loader. It appears that during operation, the backhoe attachment rotated backward pinning the upper chest of the operator between a handrail on the backhoe frame and the cab surrounding the normal operating position of the loader.

Illustration: Normal position of Bobcat loader with backhoe



- Safety chain around backhoe and tool bar
- Independent seat and controls in front of cab compartment



Warning label of the hazard on the equipment



After incident: Backhoe frame rotated backward into cab



Degree of Rotation: Stabilizers normally perpendicular to the ground



- Upper points of Backhoe attachment engaged
- Lower points of Backhoe attachment not engaged

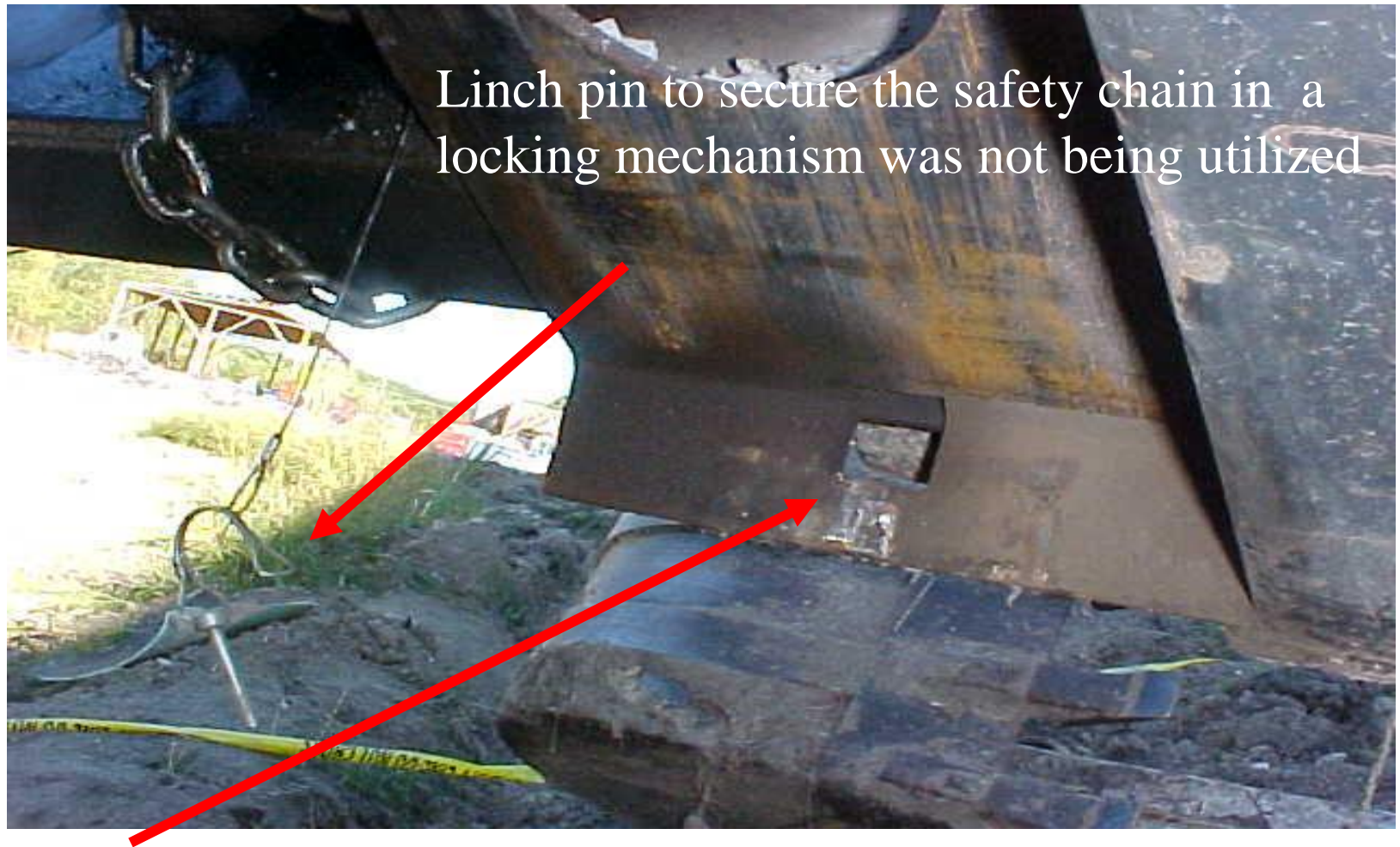


Levers on the tool bar to engage and disengage backhoe locking pins (2) found in a disengaged position after incident



One of the two locking pins in an engaged position.

Note: They were not found in this position after the incident.



One of the two slots in the Backhoe frame for the locking pins to protrude through and secure the Backhoe to the Tool Bar



Safety chain secured around the backhoe frame – instead of both the backhoe and Tool Bar. The Safety chain was not broken.



Operator caught between backhoe handrail and cab enclosure



Close-Up of the Pinch point

Preliminary Observations

- ✓ The levers for locking pins appeared operational and the locking pins did not appear to be damaged.
- ✓ The safety chain was not broken. It was found to be secured only around the backhoe instead of both the backhoe and tool bar.

Unresolved at this Point...

- Contractors mobile equipment program details
- Formal Training of the Operator on the Bobcat Backhoe
- Experience level of Operator on Bobcat Loaders
- Circumstances around the Backhoe assembly
- Reasons for Operator failing to secure the Backhoe with the locking pins and safety chain
- Whether a pre-use inspection was conducted by the Operator

Actions for All Locations

- ❖ Emphasize pre-use inspections to confirm proper installation and condition of equipment
- ❖ Re-emphasize in training the need to properly engage and secure attachments and safety devices
- ❖ Abide by manufacturer's warning labels and Instructions for safe operation of equipment